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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/705,861	11/13/2003	Randall B. Metcalf	23435-007-403	6301
909	7590 12/29/2005		EXAM	INER
PILLSBUR P.O. BOX 1	RY WINTHROP SHAW I	FLETCHER, MARLON T		
	MCLEAN, VA 22102		ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 12/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		\$				
	Application No.	Applicant(s)				
	10/705,861	METCALF, RANDALL B.				
Office Action Summary	Examiner	Art Unit				
	Marlon T. Fletcher	2837				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	l.  lely filed  the mailing date of this communication.  O (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 05 Oc	toher 2005					
	<ul> <li>X Responsive to communication(s) filed on <u>05 October 2005</u>.</li> <li>X This action is FINAL.</li> <li>2b) This action is non-final.</li> </ul>					
	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims	, , , , , , , , , , , , , , , , , , , ,					
4) Claim(s) 25-47 is/are pending in the application						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) 25-47 is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner	•					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign  a) All b) Some * c) None of:	oriority under 35 U.S.C. § 119(a)	-(d) or (f).				
<ol> <li>Certified copies of the priority documents</li> </ol>	have been received.					
2. Certified copies of the priority documents	• •					
3. ☐ Copies of the certified copies of the priori		d in this National Stage				
application from the International Bureau	• • • • • • • • • • • • • • • • • • • •	_				
* See the attached detailed Office action for a list of the certified copies not received.						

U.S. Patent and Trademark Office PTOL-326 (Rev. 7-05)

Paper No(s)/Mail Date \_\_\_

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)

Attachment(s)

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_.

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## **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 25-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki et al. (6,608,903) in view of Aylward ert al. (5,809,153).

Miyazaki et al. disclose a system for modeling a sound field produced by a sound source that generates a radiating sound field that comprises predetermined parameters (figure 1), the system comprising: N transducers (MCi- MCn), arranged to at least radially surround the sound source (Sr), for capturing the sound field and generating N signals that correspond to the captured sound field (figure 1); means (42) for modeling the sound field based on at least some of the N signals, including selected ones of the predetermined parameters; and means-for selectively modifying one or more parameters of selected ones of the N signals to produce a modified sound field (via speakers SP1-SPm) and M transducers (SP1- SPm) to at least partially surround an equivalent sound source as seen in figure 1. Miyazaki et al. further disclose driver means for receiving N signals corresponding to the modified sound field and driving a reproduction of the modified sound field (figure 1). Miyazaki et al. disclose a driver means is operable to selectively modify one or more parameters of selected ones of the

N signals that correspond to the modified sound field (figure 5). Miyazaki et al. disclose storing means (40) for storing the modeled sound field and storing means (40) for storing the modified sound field means.

Miyazaki et al. do not disclose M transducers being oriented away from the equivalent sound source to emit the modified sound filed outwardly from the equivalent sound source.

However, Aylward et al. discloses a system for radiating a sound field outwardly from a sound source, wherein transducers are oriented away from a sound source and the transducers receive an audio signal for radiating the sound field as seen in figures 1-4, 6A, 7, and 8.

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize the teachings of Aylward et al. with the teachings of Miyazaki et al., because the teachings allow the sound to be radiated inwardly or outwardly, based on user's desire.

## Response to Arguments

3. Applicant's arguments with respect to claims 25-47 have been considered but are moot in view of the new ground(s) of rejection.

Miyazaki et al. was discussed in the previous office action as well as above. The newly added limitation required a new search. The addition of Aylward et al. was applied to meet the newly added limitations. The claims remain rejected.

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4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marlon T. Fletcher whose telephone number is 571-272-2063. The examiner can normally be reached on M-w, F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 571-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**MTF** 

December 26, 2005

PRIMARY EXAMINER